SAMSUNG TECHWIN

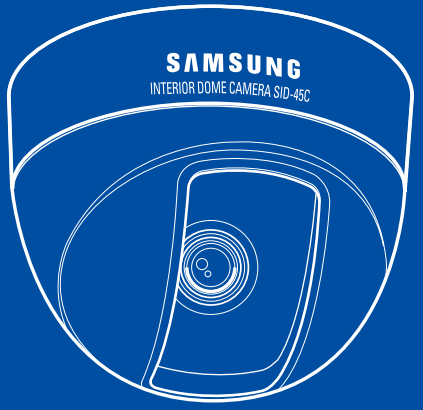
SALES NETWORK

- **SAMSUNG TECHWIN CO., LTD.**
  145-3, Sangdaewon 1-dong, Jungwon-gu, Seongnam-si,
  Gyeonggi-do 462-703, Korea
  TEL : +82-31-740-8137~8141 FAX : +82-31-740-8145
- **SAMSUNG OPTO-ELECTRONICS AMERICA,INC.**
  ELECTRONIC IMAGING DIV.
  40 Seaview Drive, Secaucus, NJ 07094, U.S.A
  TEL : +1-201-902-0347 FAX : +1-201-902-0429
- **SAMSUNG TECHWIN MOSCOW OFFICE**
  Korp 14, 37-A, PR-KT, Lenningradsky, Moscow 125167, Russia
  TEL : +7-95-258-9296,9298 FAX : +7-95-258-9297
- **SAMSUNG OPTO-ELECTRONICS UK, LTD.**
  Samsung House, 1000 Hillswood Drive, Hillswood Business
  Park Chertsey, Surrey KT16 OPS
  TEL : +44-1932-45-5308 FAX : +44-1932-45-5325
- **TIANJIN SAMSUNG OPTO-ELECTRONICS CO., LTD.**
  7 Pingchang Rd, Nankai Dist. Tianjin 300190, P.R China
  TEL : +86-22-2761-4724(33821) FAX : +86-22-2761-6514

www.samsungtechwin.com
www.samsungcctv.com

P/No. : Z6806-0671-01A
VAN 05. 09

SAMSUNG TECHWIN



HIGH RESOLUTION DAY & NIGHT DOME CAMERA

INSTRUCTION MANUAL

SID-45C

About this manual

Before installing and using the camera, please read this manual carefully. Be sure to keep it handy for later reference.

Thank you for purchasing a **SAMSUNG CCD CAMERA**.
Before operating the camera, confirm the camera model and proper input power voltage. In order that you can understand this manual thoroughly, we'll introduce our model description.

■ **SID-415 SERIES**

- NTSC models
  SID-45CN
- PAL models
  SID-45CP

■ **Model Description**

- SDC-415C X

  Signal system

- SIGNAL SYSTEM
  N ⟶ NTSC Model
  P ⟶ PAL Model

Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.
Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.
Business users should contact their supplier and check the terms and conditions of the purchase contract.
This product should not be mixed with other commercial wastes for disposal.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION :
TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK),
NO USER SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED
SERVICE PERSONNEL.

The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION - This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

WARNING - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

WARNING : To prevent electric shock and risk of fire hazards:

- ◆ Do NOT use power sources other than that specified.
- ◆ Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.

Features

Horizontal Resolution 530 TV Lines

Clear image quility has been achieved by employing a CCD with 410,000 pixels(NTSC), 470,000 pixels(PAL) and optimized WINNER3 DSP CHIP which provides a horizontal resolution of 530 TV lines.

High Sensitivity

The built-in high sensitivity COLOR CCD enables a clear image even in 0.002Lux (Sens-up) or lower illumination.

Electronic DAY & NIGHT

This camera has a function that electronically selects the mode that is appropriate for daytime or night-time conditions. The COLOR mode operates in daytime conditions to provide optimum colors, and BW mode operates in night-time conditions to enhance the definition of the image.

SSNR (Samsung Super Noise Reduction)

By using built-in SSNR function manufactured by SAMSUNG TECHWIN, the amount of low illuminance noise has been significantly reduced, and the signal-to-noise ratio (S/N) as well as horizontal resolution have been improved, resulting in a clear and sharp image display even in the dark.

PRIVACY Function

The PRIVACY function conceals the areas you do not wish to appear on the screen.

Controlled by OSD Menu

The camera can be controlled by selecting text displayed on the monitor screen.

Pan and Tilt

Pan and tilt are available after installing camera.

Additional Functions

SENS-UP, MOTION DETECTION, MIRROR, SHARPNESS and SYNC(INT/LL) functions are also available.

Warning

The camera needs periodic inspection.

Contact an authorized technician for inspection.

Stop using your camera when you find a malfunction.

If you use your camera around smoke or unusual heat for a long time, a fire may be caused.

Do not Install the camera on a surface that can not support it.

Unless the surface is suitable, it could cause falling or other hazards.

Do not handle the camera with wet hands

It could cause an electric shock.

Do not disassemble the camera.

It may result in fire, electric shock or other hazards.

Do not use the camera close to a gas or oil leak.

It may result in fire or other hazards.

Contents

Precautions 8

Composition 10

Name and Function of Each Part 11
- Front 11
- Back 12

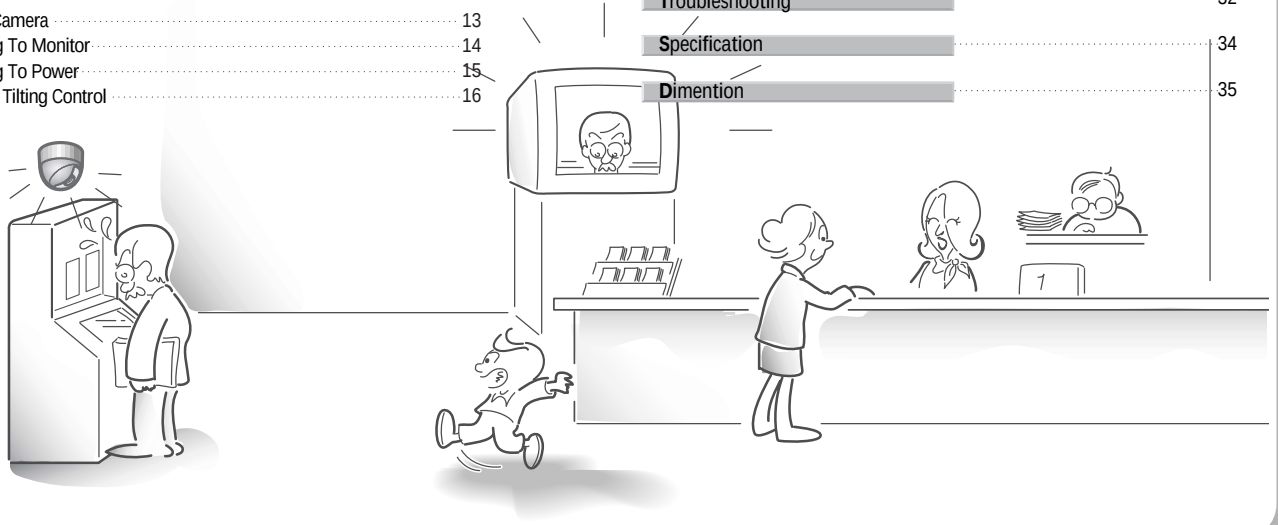
Installation 13
- Installing Camera 13
- Connecting To Monitor 14
- Connecting To Power 15
- Panning & Tilting Control 16

Camera Operation 17
- Menu 17
- Setting 18
  - SHUTTER (condition and speed control) 19
  - WHITE BALANCE control 20
  - BACKLIGHT (Backlight Compensation) 22
  - AGC (Auto Gain Control) 23
  - SSNR (Samsung Super Noise reduction) 24
  - SPECIAL 26

Troubleshooting 32

Specification 34

Dimention 35



Precautions

Do not install the camera in extreme temperature conditions.

Only use the camera under conditions where temperatures are between -10˚C and +50˚C. Be especially careful to provide ventilation when operating under high temperatures.

Do not install or use the camera in an environment where the humidity is high.

It can cause the image quality to be poor.

Do not install the camera under unstable lighting conditions.

Severe lighting change or flicker can cause the camera to work improperly.

Never use the camera close to a gas or oil leak.

It can cause malfunctions to occur.

Do not disassemble the camera.

There are no user-serviceable parts inside it.

Do not touch the front lens of the camera.

It is one of the most important parts of the camera. Be careful not to be stained by fingerprint.

Never keep the camera face to strong light directly.

It can damage the CCD.

Do not drop the camera or subject them to physical shocks.

It can cause malfunctions to occur.

Do not expose the camera to rain or spill beverage on it.

If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode the electronic components.

Notes

- If the camera is exposed to spotlight or object reflecting strong light, smear or blooming may occur.
- Please check that the power satisfies the normal specification before connecting the camera.

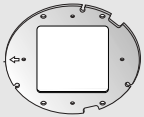
Composition

1. HIGH RESOLUTION DAY & NIGHT DOME CAMERA

2. Instruction Manual

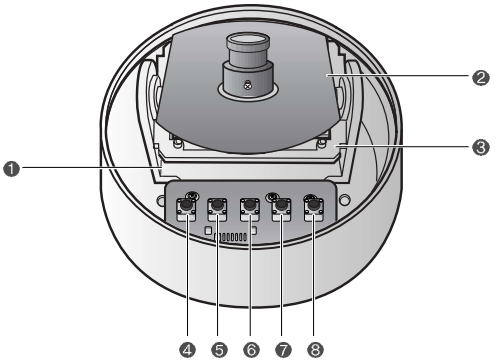
3. M3 Tapping Screws 4EA

4. Bracket



Name and Function of Each Part

FRONT



❶ **Pan Base**
You can rotate the lens from 340˚

❷ **PCB Front Cover**

❸ **Tilt Base**
You can adjust up and down the camera(30°~90°).

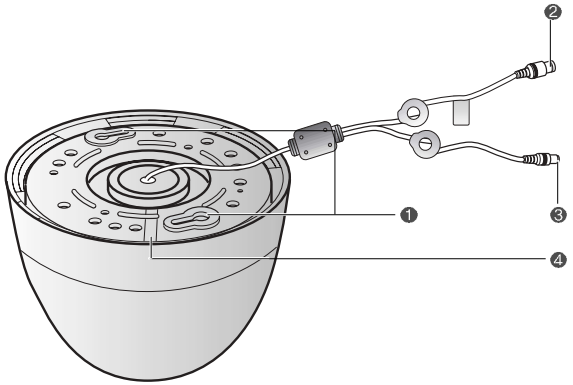
Funtion Setting Button (❹~❽)

❹ **SETUP button :** Used for the menu display.
Conform the status of the selected function.

❺ **LEFT &** ❻ **RIGHT button:** Used when changing item values, by moving the cursor to the left or right on the menu screen.

❼ **UP &** ❽ **DOWN button:** Used for selecting items by moving the cursor Up or down on the menu screen.

BACK



❶**Groove for fixing camera**

❷**Power input jack**

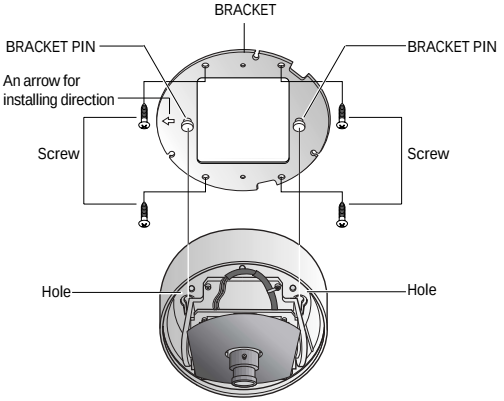
❸**BNC Jack**

❹**Cable guide hole**

When the camera is installing on the ceiling, put the POWER & BNC JACK into the cable guide hole.

Installing Camera

1. Fix the Bracket to suitable position where the camera will be installed.
2. After inserting the Bracket pin to camera hole, rotate the camera right.
3. After adjusting the camera, cover the Dome-Cover.



Notes

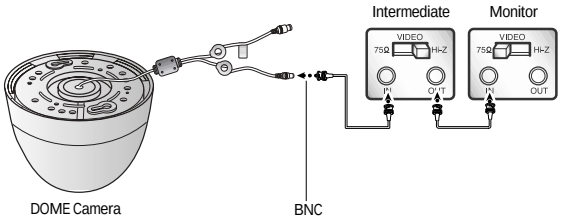
Please locate an arrow for installing direction that you wish to observe Area and then fix four screws.

•If you want to separate the Dome-Cover, Position the Hook between printed characters 'SID-45C' (model name) following the illustration.

Connecting to a Monitor

Please connect the video output terminal located on the back of the camera to the monitor.

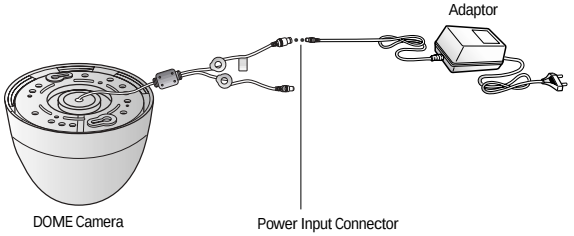
- The connection method varies depending on the type of monitor and accessories. Please refer to the user's manual for each instrument.
- Please turn off the power when connecting.
- Please select Hi-Z on the 75Ω/Hi-Z switch for the intermediate video TV set and select 75Ω for the Intermediate device as shown in the picture below.



Connecting to Power

Connect the adaptor to the power input connector as shown in the figure below. The recommended adaptor specification for SID-45CN/SID-45CP is DC 12V, 500mA .

DC Power Type (DC 12V, 500mA)



When the resistance value of copper wire is at [20°C(68°F)]

Copper wire size (AWG)	#24(0.22mm²)	#22(0.33mm²)	#20(0.52mm²)	#18(0.83mm²)
Resistance (Ω / m)	0.078	0.050	0.030	0.018
Voltage Drop (V/m)	0.028	0.018	0.011	0.006

- As shown in the table above, voltage decreases as the wire gets longer. Therefore use of an excessively long adaptor output line for connection to the camera may affect the performance of the camera.

*Standard voltage for camera operation : DC 12V±10%
*There may be some deviation in voltage drop depending on the type of wire and the manufacturer.

Panning & Tilting Control

You can adjust the Panning and Tilting angle freely. (Panning angle: 0˚ to 340˚, Tilting angle: 30˚~90˚)

1. Adjustment Panning angle:

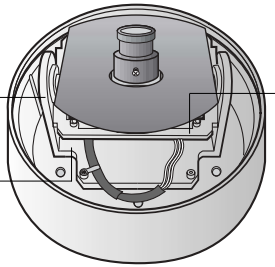
After attaching the dome camera to ceiling, adjust the panning angle for better monitoring area by rotating the Pan Base.

The panning angle can be adjusted to 0°£ from 340˚ freely.

2. Adjustment Tilting angle:

After attaching the dome camera to ceiling, adjust the tilting angle for better monitoring area by rotating the Tilt Base.

The tilting angle can be adjusted to 30˚ from 90˚ freely. (based the ceiling surface)



Notes

- In case of adjusting the tilting, do not take the lens for preventing physical shocks. Please take the Tilt Base.
- This dome camera is designed to installing on the cailing. In case of need to use camera on the wall, because of the angel of attaching, the image can be turned upside down. In this case, please installing the camera after manufacturing the Bracket.

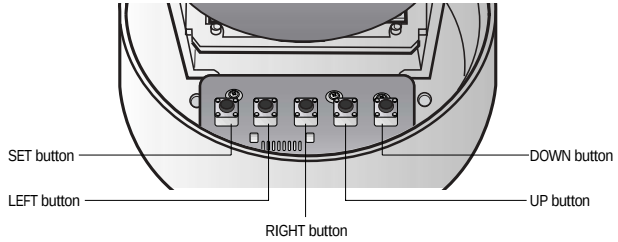
Menu

SETUP menu			
SHUTTER (condition and speed control)	• ESC	• MANUAL	• FLK
WHITE BALANCE control	• ATW	• AWC	• MANUAL
BACKLIGHT (Backlight compensation)	• OFF • HIGH	• LOW	• MIDDLE
AGC (Auto Gain control)	• OFF • HIGH	• LOW	• MIDDLE
SSNR (Samsung super noise reduction)	• OFF • HIGH	• LOW	• MIDDLE
SENS-UP (Low illuminance)	• OFF	• AUTO	
SPECIAL	• CAMERA ID • SYNC • PRIVACY • SHARPNESS • RETURN	• COLOR • MOTION DETECTION • MIRROR • RESET	
EXIT			

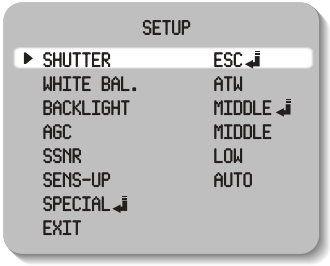
Camera Operation

Settings

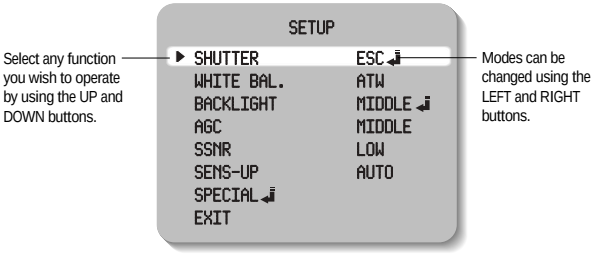
Settings can be made using the 5 buttons located on the inside of the camera.



1. Please press the SETUP button
   • Settings can now be made. The SETUP menu is displayed on the monitor.



2. Please select any function you wish to activate by using the UP and DOWN buttons.
   • The arrow can be moved up or down by using the UP and DOWN buttons. Please position the arrow to point to the function you wish to operate.



3. Please press the LEFT or RIGHT button if you wish to change mode.
   • When the LEFT or RIGHT button is pressed, available values and modes are displayed in order. Please keep pressing the button until you get to the mode you wish to operate.
4. Please select 'EXIT' and then press the SETUP button to finish the setting.

Notes

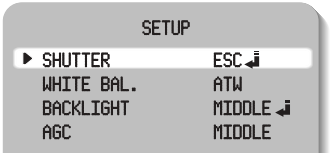
- If ↵ appears at the mode you wish to operate, it means that there is a sub-menu which can be selected by pressing the SETUP button.
- If - - - appears at the mode item, it means that there is no mode available to be selected.

SHUTTER (condition and speed control)

Auto or manual control can be selected.

1. When the SETUP menu is on the screen, please position the arrow to point to 'SHUTTER' by using the DOWN button.
2. Please select the shutter mode by pressing the LEFT or RIGHT button.

- **FLK:** Please select 'FLK' mode when flickering occurs on the screen, due to an imbalance between illumination and frequency. NTSC Model:1/100, PAL MODEL: 1/120
- **ESC:** Auto control of the shutter speed can be achieved. When ESC mode is on, the speed is controlled automatically according to the brightness of the screen.
- **MANUAL:** The shutter speed can be controlled manually.



3. Please select 'MANUAL' mode if you wish to adjust the shutter manually.
   - You can select speed from '1/60' to '1/120,000'sec (NTSC Models), '1/50' to '1/120,000'sec (PAL Models).
4. Please press the SETUP button when all the settings are complete.

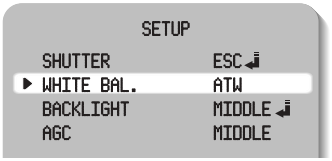
Notes

- While using the internal synchronous system, if the shutter setting is on 'ESC' and the camera is directly facing a bright fluorescent light, the image on the screen can be adversely affected. Therefore please choose the installation location with care.
- When 'MANUAL' mode is on, the SENS UP function does not operate.

WHITE BALANCE control

The screen color can be adjusted by using the WHITE BALANCE function.

1. Please position the arrow to point to 'WHITE BAL' on the SETUP menu by using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the LEFT or RIGHT button.



*Please select one of the 3 modes below.

- **ATW(Auto Tracking White Balance):** This mode can be used within the color temperature range 1,800°K ~ 10,500°K (eg, fluorescent light, outdoor, sodium vapor lamp or inside tunnels)
- **AWC(Auto White Balance Control):** Please press the SETUP button while the camera is directed at a piece of white paper to obtain the optimum state under current illumination. If the environment including the light source is changed, you have to adjust the white balance again.
- **MANUAL:** The manual adjustment mode enables finer adjustment.
  Please select ATW or AWC first. Please change to manual adjustment mode and press the SETUP button. Please set the appropriate color temperature, and then increase or decrease the red and blue color values while monitoring the color changes on the object.

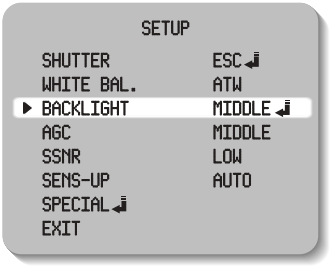
Notes

- Under the following conditions the WHITE BALANCE function may not operate properly. In such cases, please select the AWC mode.
  1. When the object's surroundings have a very high color temperature (eg, a clear sky and sunset)
  2. When the object's surroundings are dark
  3. If the camera directly faces a fluorescent light or is installed in a place where there are considerable changes in illumination, the WHITE BALANCE function may become unstable.

BACKLIGHT (Backlight Compensation)

When there is a strong backlight behind the object, clear images of the background as well as the object can still be obtained by using the BACKLIGHT function.

1. Please position the arrow to point to 'BACKLIGHT' on the SETUP menu by using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the LEFT or RIGHT button.



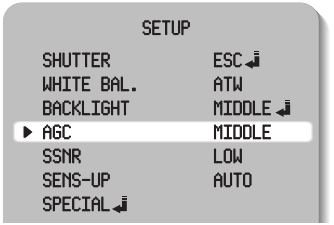
- **HIGH/MIDDLE/LOW:** You can adjust the sensitivity of Backlight Compensation.
- **OFF:** BACKLIGHT function does not operate.

BACKLIGHT ON

BACKLIGHT OFF

AGC (Auto Gain Control)

1. Please position the arrow to point to 'AGC' on the SETUP menu by using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the LEFT or RIGHT button. As the level of gain increases, the screen gets brighter and the level of noise also increases.
   - **HIGH:** The gain increases or decreases within the range of 6dB ~ 34dB.
   - **MIDDLE:** The gain increases or decreases within the range of 6dB ~ 30dB.
   - **LOW:** The gain increases or decreases within the range of 6dB ~ 18dB.
   - **OFF:** The gain is fixed at 6dB.



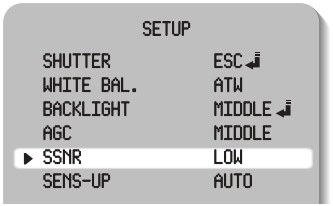
3. Please press the SETUP button. The BRIGHTNESS can be adjusted within the range of 1~70.

4. Please press the SETUP button when all the settings are complete.

SSNR (Samsung Super Noise reduction)

The background noise in the low light level decreases automatically as the level of gain changes.

1. Please position the arrow to point to 'SSNR' on the SETUP menu by using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the LEFT or RIGHT button.



- **OFF:** There is no reduction in noise level.
- **LOW:** There is a small reduction in noise level with almost no ghost image.
- **MIDDLE:** The most effective mode. There is a sufficient reduction in noise levels without causing much ghost imaging.
- **HIGH:** The level of noise is reduced greatly, however there is an increase in ghost imaging.

Notes

- When AGC is turned off, SSNR does not operate.

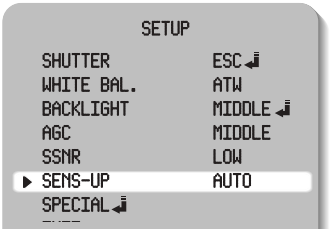
SENS UP (Low illuminance)

SENS UP helps maintain a bright, clear screen image by automatically detecting changes in the level of light in low light level conditions.

1. Please position the arrow to point to 'SENS UP' on the SETUP menu by using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the LEFT or RIGHT button.
   - **AUTO:** Low light level auto mode
   - **OFF:** The function does not operate.

Notes

- When SHUTTER is in the manual mode, SENS UP does not operate.
- When AGC is turned off, SENS UP does not operate.



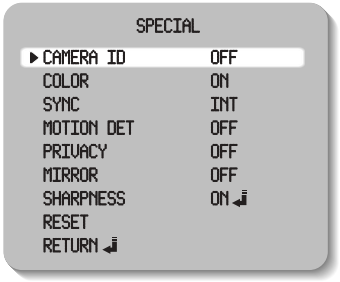
3. Please press the SETUP button when all the settings are complete.

Notes

- The maximum storage magnification in low light level can be adjusted by pressing the SETUP button in 'AUTO' mode.(X2~X128)
- As the magnification increases, the screen gets brighter; moving object gets more afterimage.
- If storage magnification is increased while SENS UP is operating, it may cause noise, and spots may appear; however this is normal.

SPECIAL

1. Please position the arrow to point to 'SPECIAL' on the SETUP menu by using the UP and DOWN buttons.
2. Please select the mode you wish to operate by pressing the UP or DOWN button.

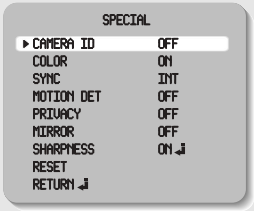


➲**CAMERA ID:** If the ID is input, the camera ID appears on the monitor.

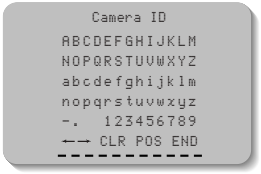
1) Please position the arrow to point to 'CAMERA ID' by using the UP or DOWN button.
2) Please select 'ON' by pressing the LEFT or RIGHT button.

Notes

- If 'OFF' is selected, the ID does not appear on the monitor even if it has been input.

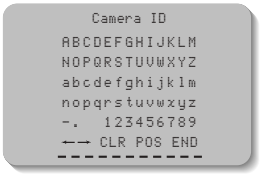


3) Please press the SETUP button.



4) Up to 15 letters can be used for the ID.

❶Please move the cursor to the letter you wish to choose by using the UP and DOWN button.



❷Select an ID from A, B~Y, Z, a, b~y, z, 0,1~8, 9 by using the UP, DOWN, LEFT and RIGHT buttons.

❸Please lock in the letters by using the SETUP button.

- When the letter is locked in, the cursor moves to the next space.

❹Please repeat the above to input the ID.

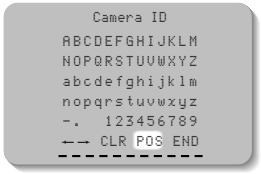
Notes

- **If the wrong name has been input.....**

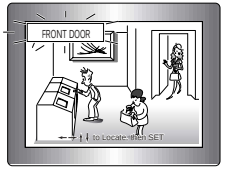
If you press the SETUP button after moving the cursor to CLR, all the letters will be erased. If you want to correct a letter, please move the cursor to the arrow at the bottom left of the screen and press 'SET'.Please position the cursor above the letter you wish to correct, and then move the cursor onto the letter you wish to choose and press the SETUP button.

5) When a name has been chosen, please select a position for the name display.

❶Please move the cursor onto 'POS' and then press the SETUP button.



❷The name will appear at the top left hand corner.



❸Please find the position you wish to display the name by using the 4 directional buttons, and then press the SETUP button.

6) Please select 'END' and then press the SETUP button to complete ID input.

COLOR (Electronic DAY & NIGHT)

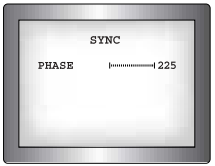
- AUTO: This camera has a function which electronically changes to the appropriate mode for daytime or night-time. The COLOR mode is operated for daytime, and it converts to BW mode for night-time.
- ON: The color mode is selected electronically.

Notes

- If AGC is OFF, you can't select AUTO mode.
- When an infrared light is used, there may be a problem with focusing and COLOR (DAY & NIGHT).

SYNC : In LINE-LOCK mode, it synchronizes the video signal between cameras without a synchronous generator.

- INT : Internal synchronization - LL : External line-lock synchronization
- If you choose 'LL', you can adjust the desired phase. Press the SET button.
- You can adjust the desired phase from 0 to 359.



Notes

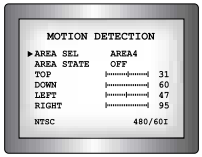
- 'Sync' mode is fixed 'INT' in DC 12V input power.

MOTION DETECTION:

This product has a feature that allows you to observe movements of objects in 4 different areas on the screen, and the words 'MOTION DETECTED' appear on the screen when movement is detected; hence a single individual can conduct supervision efficiently. The camera detects an object's movement by sensing disparity of outline, and level of brightness and color.

- Please press the SETUP button.
  - OFF : MOTION DETECTION mode is cancelled.
  - ON : Any motion in the selected areas is observed.
- Please select the area you wish to observe from the 4 areas in AREA SEL mode.
- Please select ON mode for the chosen area.

• Please adjust the size of the area to be observed by using the UP, DOWN, LEFT or RIGHT button.



• Please press the SETUP button to save the changes and complete the setting.

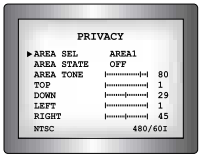
Notes

• 'MD' is on screen display only words.

PRIVACY: This modes conceals the areas you do not wish to appear on the screen.

- OFF : Cancels the PRIVACY mode.
- ON : Operates the PRIVACY mode.

• Please press the SETUP button.



• Please select the area you do not wish to appear from the 4 areas in AREA SEL mode.
• Please select ON mode for the chosen area.
• Please adjust the size of the area to be concealed by using the UP, DOWN, LEFT or RIGHT button.

MIRROR

- ON : Sets a horizontal image inversion.
- OFF : Cancels the inversion.

MIRROR ON

MIRROR OFF

SHARPNESS: The outline of the video image becomes cleaner and more distinctive as the level of SHARPNESS increases. If the level goes up excessively, however, it may affect the video image and generate noise.

• Please press the SETUP button.

• The available range of level is 0 ~ 31.

RESET: Returns to the level which was set by the manufacturer for shipment.

RETURN: Returns to the SETUP menu.

EXIT

Saves all the setting menus and then exits.

Troubleshooting

If you have trouble operating your camera, refer to the following table. If the guidelines do not enable you to solve the problem, contact an authorized technician.

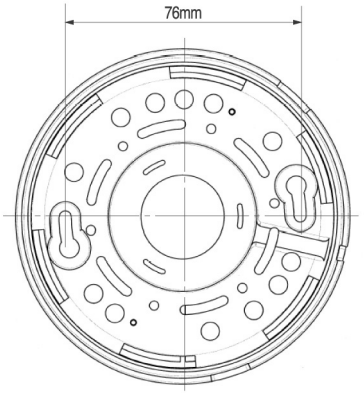
Problem	Solution
Nothing appears on the screen.	• Please check the power connection. • Please check the video signal line connection. • Please check the Brightness of Auto Iris lens.
The video image is not clear.	• Please check if the lens is clean. Please clean the lens with a clean cloth or brush. • Please adjust the contrast feature of the monitor. • Please make sure that the screen is not exposed directly to a bright light. Please move the camera if necessary.
The screen is dark.	• Please adjust the contrast feature of the monitor. • If you have an intermediate device, set the 75Ω/ Hi-z properly, and check the terminals. (refer to page 14)
There is a problem with the camera operation. The camera surface is too hot and black stripes appear on the screen.	• Please check if an appropriate power source to the camera complies with the manufacturer's standard requirement, or if the voltage keeps changing.

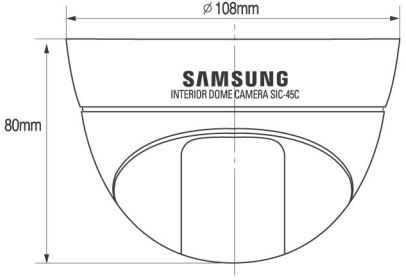
Problem	Solution
The MOTION DETECTION function is not working.	• Please check if 'MOTION DETECTION' mode is turned on. • Please check if the MD LEVEL is too low. • Please check the setting of the MD AREA.
Colors are not quite right.	• Please check the 'WHITE BAL' setting. (Please refer to page 20)
The screen is flickering.	• Please check if the camera is facing directly into sunlight or fluorescent light.
L/L mode isn't able to be selected.	• When using DC 12V input power, 'Sync' mode is fixed to 'INT'.
COLOR (DAY & NIGHT) mode is not working.	• Please check if the AGC menu is set to the OFF position.
SENS-UP function is not working.	• Please check if the AGC menu is set to the OFF position. • Please check if the SHUTTER menu is set to MANUAL mode. • Please check the limit of Sens-UP AUTO mode.

Specifications

ITEM		SID-45CN	SID-45CP
Power Source		DC 12V±10%/Max. 1.8W	
CCD	Total Pixels	811(H) x 508(V)	795(H) x 596(V)
	Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
	SIZE	1/3 inch Super HAD CCD	
Sync.	Scanning System	2:1 Interlace	
	Synchronization	Internal Only	
	Frequency	Horizontal:15.734 KHz/Vertical :59.94Hz	Horizontal: 15.625 KHz/Vertical : 50Hz
LENS(Built-in)		Fixed Lens f=3.7mm, 92˚ F2.0 (6mm, 8mm option)	
ELECTRICAL	Resolution	530 TV Lines (Min.)	
	Video Output	CVBS : 1.0Vp-p/75Ω	
	S/N(Y signal)	50dB (AGC Off, Weight ON)	
	Min.Illumination	0.3 Lux/F1.2, 0.002 Lux/F1.2 (Sens-upX128)	
	COLOR(DAY&NIGHT)	ON/AUTO (Daytime: COLOR, Night time: B/W)	
	Gain Control	OFF/LOW/MIDDLE/HIGH	
	White Balance	ATW/AWC/Manual (1800˚K~10,500˚K)	
	Electronic shutter speed	AUTO/MANUAL (1/60sec ~ 1/120,000sec)	AUTO/MANUAL (1/50sec ~ 1/120,000sec)
	Sens-up	OFF/AUTO(X2~X128)	
	O.S.D	Built-in	
	Motion Detection	OFF/ON(4 Programmable Zone)	
	SSNR	OFF/LOW/MIDDLE/HIGH (Noise Control)	
	MIRROR	OFF/ON (Horizontal Image Inversion)	
Privacy Function		OFF/ON (4 Programmable Zone)	
Monitoring Angle	Pan	Manual 0˚~ 340˚	
	Tilt	Manual 30˚~ 90˚	
Operating temperature/Humidity		-10˚C to +50˚C / 30% to 80% RH	
Dimention		Ø108 x 80mm(H)	
Weight		210g	

Dimension





DECLARATION OF CONFORMITY

Application of Council Directive(s)	89 / 336 / EEC
Manufacturer's Name	SAMSUNG TECHWIN CO., LTD
Manufacturer's Address	SAMSUNG TECHWIN CO., LTD
	42, SUNGJU-DONG CHANGWON-CITY,
	KYUNGNAM, KOREA, 641-120
European Representative Name	
European Representative Address	
Equipment Type/Environment	CCTV Camera
Model Name	SID-45CP
Beginning Serial NO.	S5900001
Year of Manufacture	2005. 9. 1
Conformance to	EN 50081-1 : 1992
	EMC-Directive 89/336 EEC and 92/31/EEC
	EN 50130-4 : 1996

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

Manufacturer	SAMSUNG TECHWIN CO., LTD	Legal Representative in Europe
Signature		Signature
Full Name	YOUNG TAEK SON	Full Name
Position	QUALITY CONTROL MANAGER	Position
Place	CHANGWON, KOREA	Place
Date	2005. 9. 1	Date

MEMO

MEMO

MEMO